AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES MADE, AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS

1. (Canceled)

2. (Currently amended) ~~The~~ A method ~~of claim 1~~ for controlling a back pressure in an injection molding machine having a first motor, which rotates at a first rotation speed for moving a screw in an axial direction, and a second motor, which rotates at a second rotation speed for rotating the screw, wherein the first and second motors act on a common shaft, said method comprising the step of changing a difference between the first and second rotation speeds for changing the back pressure, wherein the first rotation speed is determined in a first control circuit and the second rotation speed is determined in a second control circuit, wherein a rotation speed value determined in the second control circuit is provided to the first control circuit as a rotation speed input value.

3. (Original) The method of claim 2, and further comprising the steps of determining in the first control circuit a difference between a target back pressure and an actual back pressure, determining a rotation speed difference based on the determined difference between the target back pressure and the actual back pressure, and adding to the determined rotation speed difference the rotation speed input value supplied by the second control circuit.

4. (Canceled)

5. (Currently amended) ~~The~~ A method ~~of claim 4~~ of controlling a back pressure in an injection molding machine, comprising the step of:

determining the rotation speed of a first motor intended for displacing a screw in an axial direction;

determining the rotation speed of a second motor intended for turning the screw;

determining a difference between the rotation speeds of the first and second motors, and

varying the difference between the rotation speeds for modifying the back pressure,

wherein the step of determining the rotation speed of the first motor is executed by a first control circuit which generates a rotation speed value, and the step of determining the rotation speed of the second motor is executed by a second control circuit which receives the rotation speed value from the first control circuit for use as rotation speed input value.

6. (Original) The method of claim 5, wherein the second control circuit executes the steps of determining a differential between a target back pressure and an actual back pressure, acquiring from the determined differential between the target back pressure and the actual back pressure the difference in the rotation speeds of the first and second motors; and adding the rotation speed input value from the first control circuit to the difference in the rotation speeds.

7. (Currently amended) A control system for controlling a back pressure in an injection molding machine having a first motor, which rotates at a rotation speed for moving a screw in an axial direction, and a second motor, which rotates at a rotation speed for turning the screw, wherein the first and second motors act on a common shaft, said control system comprising:

a first control circuit for generating a time-dependent speed signal in response to the rotation speed of the first motor [[and]]; [[and]]

a second control circuit for generating a time-dependent speed signal in response to the rotation speed of the second motor, and

a connection line for coupling the first and second control circuits and supplying the time-dependent speed signal from the first control circuit to the second control circuit as a speed input value.

8. (Original) The control system of claim 7, wherein the second control circuit includes an adder which receives the time-dependent speed signal and adds a signal commensurate with a difference between a target back pressure and an actual back pressure.

9. (New) The method of claim 2, wherein the first and second motors are controlled in such a way that the screw is moved in axial direction in the absence of a rotation of the second motor.

10. (New) The method of claim 5, wherein the first and second motors are controlled in such a way that the screw is moved in axial direction in the absence of a rotation of the second motor.

11. (New) The method of claim 8, wherein the first and second motors are controlled in such a way that the screw is moved in axial direction in the absence of a rotation of the second motor.